

### **REMARKS**

This amendment is in response to the Office Action mailed September 19, 2006. Claims 1, 8, 13, and 19 have been amended and claims 27 and 28 have been added. Claims 1-28 are presently pending. No new matter has been added.

#### **§103 and Double Patenting Rejection**

Claims 1-26 were rejected under 35 U.S.C. §103(a) as being unpatentable over Del Corno *et al.* "Active-passive mode-locked Nd:YAG laser with passive negative feedback" ("Del Corno") in view of Il'ichev *et al.* "Model of a passively Q-switched laser accounting nonlinear absorption anisotropy in a passive switch" ("Il'ichev"). Claims 1, 5, 10-13, 16 and 21-23 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3, 7, 9, 14, 40-44 of U.S. Patent No. 6,546,027 ("027 Patent") in view of Il'ichev. The Applicant traverses these rejections.

Independent claims 1 and 13 each recite that a location (claim 1) or position (claim 13) of the SA element is variable so that the SA element can be positioned between different pairs of other components of the laser and wherein the output pulse duration can be varied by varying the location/position of the SA element. This variation in the position of the SA element is illustrated by positions I, II, III, and V in Figure 3 of the present application. In each of these positions, the SA element is between a different pair of other components of the laser. (Positions IV and V, in contrast, are between the same pair of other components of the laser.) Figure 7 of the present patent application demonstrate the variability in pulse duration due to variation in the position of the SA element. None of the cited references (Del Corno, Il'ichev, or the '027 Patent) teach or suggest such variability in the position of the SA element. In other words, none of the cited references teach or suggest variation in the location/position of the SA element by positioning the SA element between different pairs of other components of the laser.

Therefore, the references do not teach or suggest every element of the claims. For at least these reasons, claims 1 and 13, as well as the remainder of the claims which depend therefrom,

are patentable over the cited references. The Applicant respectfully requests withdrawal of the rejections of these claims.

In addition, none of the cited references teach or suggest the laser of claim 28 in which a saturable absorber (SA) element is disposed between a PNF element and a acousto-optic mode-locker.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue. If the Examiner has any questions or concerns, the Applicant encourages the Examiner to contact the Applicant's representative, Bruce Black, by telephone to discuss the matter.

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Respectfully submitted,

By 

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